US ERA ARCHIVE DOCUMENT

Van Waters & Rogers

Spokane, Washington Signed April 4, 1994

Facility/Unit Type:

Contaminants: Media:

Remedy:

Chemical distribution facility

Perchloroethylene (PCE)
Soil, sediment, ground water

Excavation and offsite disposal of contaminated soil, treatment using

vapor recovery for contaminated sediment, and ground water

monitoring

FACILITY DESCRIPTION

In 1989, based on information gathered previously during monitoring, analysis, and testing, EPA and Van Waters & Rogers (VW&R) entered into a §3008(h) agreed order to perform an RFI summarizing the extent of onsite contamination.

The Van Waters & Rogers site is a 3.9-acre chemical distribution facility located in Spokane, Washington. Since 1969, the facility has accepted bulk shipments of mineral acids, solvents, and antifreeze formulations and repackaged these items for further distribution.

There are no residential areas within 0.5 miles of the facility. Approximately 2,032 people live between 0.5 and 0.75 miles of the facility. At present, there are approximately 7 employees onsite. The ground-water aquifer beneath the facility was designated as a sole-source aquifer in 1978. There are no drinking water wells within a 2-mile radius of the facility. However, the most directly exposed population is the facility workers who might come into contact with contaminated soil or inhale soil gas emitted into the atmosphere.

The areas of PCE contamination at the site are divided into three zones: contaminated soil in and adjacent to the old corrosive tank farm, sediment in the north drywell, and ground water beneath the facility.

There have been three documented spills at the facility since operations began. In 1982, a drum of

hydrogen peroxide spilled when it was hit with a forklift. The material was washed off the recovery pad area onto the asphalt truck receiving dock and ran into the nearest drywell. In 1985, approximately 200 gallons of acetone were spilled onto the loading dock and adjacent railroad siding when a storage tank was overfilled. The remaining acetone on the dock was absorbed by floor-dry absorbent. No further treatment was initiated since site personnel assumed that the acetone had evaporated. The third spill occurred in 1986 when 100 gallons of PCE were leaked from a portable tank in the unpaved yard area. Four to seven inches of soil were removed from the spill area and spread on plastic sheeting to promote evaporation. The soil was then respread over the unpaved site area.

The subsequent 1988 site investigation determined that VOCs consisting of PCE, TCA, and TCE were the main chemicals of concern. In order to remove VOCs from the soil and reduce the migration of contaminants to the ground water, the following interim measures were implemented: soil was excavated at the old corrosive tank farm; sediment was removed from the north, west, and south drywells; and a vapor recovery system consisting of six vapor recovery wells was installed in 1989 to remove contamination from soil that was affecting ground water quality. The RFI concluded that current contamination is limited to PCE.

Since 1991, PCE has only been detected in ground-water monitoring wells three times - all below 3 µg/L, which is below the cleanup level of 5 µg/L.

CONTAMINATION DETECTED AND CLEANUP GOALS**

Media	Estimated Volume	Contaminant	Maximum Concentration (mg/lg)	Action Level (mg/lg)	Cleanup Goal	Point of Compliance
soil		Dinoseb 2, 4-D Diuron Terbutryn Glyphosate Dicamba Trifluralin Benomyl	0.0078 1.4 0.046 5.8 6.3 5.3 0.016 0.28 0.03	80 800 - - - - - -		

- * Action levels for Dinoseb and 2, 4-D are specified in "Interim Final RCRA Facility Investigation Guidance" (USEPA 1989).
- ** Maximum contaminant levels detected in the clay layer of the pond after removal of the sludge and in the off-site soils are given below.

NEXT STEPS

The facility was clean-closed and no further action is required.

INNOVATIVE TECHNOLOGIES CONSIDERED

None.

PUBLIC PARTICIPATION

The public comment period began on March 14, 1990, and closed on April 12, 1990. No written comments were received. Because no requests or inquiries were made about a public hearing, a hearing was not scheduled.

KEY WORDS

soil; dermal contact; organics; pesticides; excavation

CONTACT

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